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Rahul Mehra

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EXAMINER

ATALA, JAMIE JO

ART UNIT

PAPER NUMBER

2621

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DELIVERY MODE

09/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/802,021	MEHRA ET AL.	
	Examiner	Art Unit	
	JAMIE JO VENT	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-11 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-11 and 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because of the arrangement of the specification. Correction is required. See MPEP § 608.01(b).

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Response to Argument

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection of Schindler et al (US 5,995,155) in view of Geldman et al (US 5,740,466)

Claim Objections

3. Claim 18 is objected to because of the following informalities: The claim limitations further discloses the information being received wherein the claim states a); b); and d). Appropriate correction is required regarding changing d) to c) in Claim 18.

4. Claims 1 and 12 have been cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4, 5, 6, 7, 8, 9, 10, 11, 13-16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schindler et al (US 5,995,155) in view of Geldman et al (US 5,740,466).

[claim 18]

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In regard to Claim 18, Schindler et al discloses a receiver for digital data broadcast from a remote location (Figure 1 shows a satellite 112 and the antenna connected to the personal computer 118 therein, a receiver 316 is included in the personal computer 118 shown in Figure 3 as further described in column 7 line 46-64 and column 10 line 15-24);, said receiver comprising:

- A storage means for selective storage of digital data broadcast from a remote location (Figure 3 shows a storage system includes a tape drive 330, a disk drive 332, a CD ROM drive 334, a diskette drive 336, and a RAM 314 wherein different storages are selected to store different information as further described in column 9 line 47-line and column 10);
- A control system for control of the storage means and control of storage of data therein, the control system including a "first in first out" buffer being capable of receiving generic instructions (A control system includes a handheld remote 124, keyboard 126, a RF receiver 324 and a processor 310. Figure 9A and figure 10 show the handheld remote 124 and keyboard 126, which are further described in column 9 line 12-14; Figure 3 shows the RF receiver 324 and processor 310 as further described in column 9 line 26-46. Furthermore, the first in first out "FIFO" buffer receives generic instructions on user and system functions as described in Column 11 Lines 10-67), the single buffer further receiving:
- Identification data for a user selected program having video, audio, and or auxiliary data generated from the digital data broadcast from a remote location

(Column 10 Lines 46-67 through Column 11 Lines 1-27 describe the data related to broadcast streams containing video, audio, and closed captioning information);

- Control system commands for automating the bulk transfer of said digital data to and from storage mean (Column 11 Lines 5-17 describe the transfer of digital data to and from storage means); however, fail to disclose
 - Register read and write commands for the control of storage of the digital data in the storage means;
 - Wherein within the single first-in-first-out buffer the control commands for the control system and with the register read and write commands for the control of storage and with the identification data for a user selected program are compatible and intermixable.

Geldman et al discloses a SCSI FIFO 44 that holds instructions as seen in figure 2 and further disclosed in column 12, line 12-17 further comprising:

- Register read and write commands for the control of storage of the digital data in the storage means (Column 4 Lines 45-67 describe the read and write commands of the digital data);
- Wherein within the single first-in-first-out buffer the control commands for the control system and with the register read and write commands for the control of storage and with the identification data for a user selected program are compatible and intermixable (Column 4 Lines 45-67 through Column 5 Lines 1-33 describe the FIFO control commands and the ability to have user selected programs that are compatible and interchangeable.

Furthermore, an example of the identification data being intermixed within a single FIFO is described in Column 19 Lines 24-67).

Geldman teaches the transfer of bulk data to and from the storage means and to provide control message to allow for the system to properly process the incoming data (Column 2 Lines 47+ through Column 4 Lines 1-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the system transferring of data, as disclosed by Schindler et al, and further teach the system to use instructions for controlling the transferring of buffer information to the storage means, as taught by Geldman, to allow for proper and efficient data transfer.

[Claim 4]

In regard to Claim 4, Schindler et al discloses a system contains a receiver and a CPU as shown in Figure 3 and described in column 9 line 33-36; however, fails to disclose the receiver which characterized in that the analysis, storage and directing of the incoming data into the receiver is performed by a control processing unit (CPU) in the receiver. Geldman et al teaches that the analysis, storage, and directing incoming data into the system is performed by the CPU as seen in figure 1 and described in column 2 lines 56-63 and column 3 lines 48-65. Thereby the analysis and storage of incoming data can be done quickly. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system, disclosed by Schindler, and incorporate the receiver with analysis, storage, and directing of incoming data, as disclosed by Geldman et al, to achieve fast synchronous data transfers.

[Claim 5]

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In regard to claim 5, Schindler et al discloses a system contains a receiver that can control which data to be stored as described in Column 22 Lines 42-43 and Column 4 Lines 10-13; however, fails to disclose that the receiver in the system can control which data can be stored. In addition, Schindler et al fails to disclose the receiver can generate the signals for control buffer to allow the storage of the appropriate data. Geldman et al teaches signals for control of the buffer to allow the storage of the appropriate data (i.e. a WRITE ENABLE signal in case of a write to the data buffer RAM) as disclosed in column 17, line 1-11 and thereby information can be stored according to the WRITE ENABLE signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the receiver system, disclosed by Schindler, with the write control signal, disclosed by Geldman et al, so that less storage will be used when selected portion of the data is recorded and thereby providing a cost efficient system.

[Claim 6]

In regard to claim 6, Schindler et al discloses a system contains a receiver, a CPU, and FIFO buffer. The FIFO buffer can include data which is altered by the CPU as described in Column 10, lines 43-49 and Column 11, lines 9-11; however, fails to disclose that the CPU can load the command signals data into the FIFO. Geldman et al teaches the instructions can be hold in the FIFO as described in Column 12, line 14-17. Thereby the timing of executing the command can be adjusted accordingly in the FIFO buffer. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system, disclosed by Schindler, and

incorporate the FIFO buffer, disclosed by Geldman, to minimize the effects of access latency to achieve a higher speed and to synchronize the command signal and the data in a fast rate.

[Claim 7]

In regard to claim 7, Schindler et al discloses a system contains a receiver and a CPU wherein the command signal instructs the transfer of data to and/or from the data storage means as described in Column 22, line 43-line48; however, fails to disclose the command can also be generated from the CPU. Geldman et al discloses the CPU generates the command signals as described in column 19, line 1-10 and thereby having no additional hardware that will be needed for the command signals. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to use the system, disclosed by Schindler et al, and incorporate the CPU, disclosed by Geldman, to reduce the amount of hardware so that the cost to produce the system will decrease.

[Claim 8]

In regards to claim 8, Schindler et al discloses a system that contains a receiver wherein the command signal alter the start time for the storage of portions of incoming data as described in Column 21, line 46-57 and Column 22, line 1-9; however, Schindler et al fails to use a FIFO buffer to hold the command. Geldman et al teaches that command signals in the FIFO Buffer as described in Column 12, line 12-17. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system, disclosed by Schindler et al, and incorporate a system

with the FIFO buffer with command signals, disclosed by Geldman. Thereby making the system have a fast synchronous transfer's rate and reduce the amount of hardware use in the control system due to exclusion of a remote control or a keyboard.

[Claim 9]

In regard to claim 9, Schindler et al discloses a system contains a receiver, FIFO buffer and attached storage means shown in figure 3 and described in column 22 line 10-15; however, fails to disclose instruction in the FIFO in a generic form allows any possible register read/write command to be sent from/to the attached storage means. Geldman et al teaches that the instruction in the FIFO buffer as described in column 12, line 12-16. Geldman et al also teaches that a FIFO is used for any possible register read/write command to be sent from/to the attached storage means as described in column 13, line 46-57. Thereby the read/write command and the data to be read/write can be synchronized at the same rate. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system, disclosed by Schindler et al, and incorporate a system with the instruction FIFO, disclosed by Geldman, to prevent overruns and under runs during direct map access since the timing can be adjust by the FIFO buffer.

[Claim 10]

In regard to claim 10, Schindler et al discloses a receiver and attached storage means as shown in figure 3. Furthermore, the storage means is an ATA or ATAPI compatible device as seen in figure 3 which shows a CD ROM drive 334 (ATA stands for Advanced Technology Attachment, compatible device including Compact Disk Read Only Memory,

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which is CD ROM); however, Schindler et al fails to include the ATA compatible inside the receiver. It is well known in the art that the ATA or ATAPI compatible device can be place inside a receiver as storage. It would increase the storage capacity infinitely when use CD ROM for the memory storage system inside a receiver. Furthermore, when one CD is full, it can be replaced with a new CD so that the recording section can continue without losing a lot of information. Therefore, the examiner takes official notice that it would be obvious to use an ATA or ATAPI compatible device inside a receiver for recording purpose.

[Claim 11]

In regard to claim 11, Schindler et al discloses a receiver and a HDD as shown in figure 3. Schindler et al also discloses that bulk transfer of the streamed data to the storage means as described in column 3 lines 51-67 and column 4 lines 1-11; however, fails to address any addition information, which is not used to provide the register read/write command to the HDD. Geldman et al discloses any additional information which is not used to provide the register read/write commands to the HDD is used to instigate the automated bulk transfer to the streamed data to the storage means as described in column 6, line 41-63. Additional Information includes a Halt instruction, which is not used to provide the register read/write command to the HDD, is used instigate the automated bulk transfer of the streamed data to the storage means. Thereby the data transfer process can be stop at anytime when error occurs during the transfer process. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made use the receiver and the HDD, disclosed by Schindler et al, and

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incorporate the additional information, as disclosed by Geldman et al, to increase the robustness of the overall system performance.

[claim 13]

In regard to Claim 13, Schindler discloses a receiver wherein said command signals in the first in first out buffer allows a combined set of command signals to be generated (Column 19, line 1-10 describes the combined command signals of the FIFO).

[claim 14]

In regard to Claim 14, Schindler discloses a receiver wherein the storage means is an advanced technology attachment pack interface compatible device (Figure 1 shows the system wherein it is well known in the art that the devices have an interface compatible device).

[claim 15]

In regard to Claim 15, Schindler discloses a receiver that is connected to a storage means that allows selective storage of received data (Figure 1 shows a receiver that is connected to a storage device CPU for selective storage of received data).

[claim 16]

In regard to Claim 16, Schindler et al discloses a receiver for digital data which is broadcast from a remote location, as previously discussed in Claim 18, with the additional limitation of the storage means which allows for selective storage of received data (column 4, line 10-14 data is recorded and displayed according to user query).

[claim 17]

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In regard to Claim 17, Schnindler et al discloses a receiver wherein the data required during said bulk transfer is a multiplex of many data streams (Figure 1 shows a satellite 112 and the antenna connected to the personal computer 118 therein, a receiver 316 is included in the personal computer 118 shown in Figure 3 as further described in column 7 line 46-64 and column 10 line 15-24).

6. Claim 2 and 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Schindler et al (US 5,995,155) in view of Geldman et al (US 5,740,466) and in further view of Murtha et al US (4,166,289).

[Claim 2]

In regards to claim 2, Schindler et al discloses receiver wherein the data to be stored includes block data as described in column 3 line 65-67 and column 4 line 1-11; however fails to specify the data to be store can also comprises instruction data and the paths for said data are decouple. Geldman et al discloses the data to be stored also contains instruction data as described in column 2, line 5-8; however, fail to address the data to be store comprises block data and the path for said for the data are decoupled. Murtha et al teaches that the path for said data are decoupled as seen in figure 1A and further described in column 6, line 26-34. Thereby a fast transfer rate from one location to another can be achieved. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the stored data in the receiver, disclosed by Schindler in view of Geldman et al, and incorporate the data paths, as

disclosed by Murtha, to increase the overall system throughput and reduce the number of data path to simplify the system.

[Claim 3]

In regards to claim 3, Schindler et al discloses a system contains a receiver wherein that the data generated for the buffer is compatible with the user query that are used to automate the bulk transfer of the data to and from the storage means as described in column 11 line 9-1, column 3 line 50-67, column 4, line 1-9, column 4, line 10-14 and column 22, line 42-43. The compatibility between the data generated for the buffer and the command is further described in column 12, line 55-66 as seen in figure 8; however, Schindler et al fails to specify the query command is stored in the receiver. Geldman et al teaches the commands that are used to automate the bulk transfer of the data to and from the storage means and the command is stored in memory as described in column 2, line 5-8; however, fails to specify the data generated for the buffer is compatible with the commands. Murtha et al fail to disclose that the data generated for buffer is compatible with the commands that are used to automate the bulk transfer of the data to and from the storage means. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system contains receiver, disclosed by Schindler et in view of Geldman, to increase the robustness of the overall system performance and to achieve a fast synchronous rate, as recited by Murtha.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE JO VENT whose telephone number is (571)272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John W. Miller/
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